

Greater New Haven Water Pollution Control Authority

260 East Street New Haven, CT 06511 203.466.5280 p 203 772.1564 f www.gnhwpca.com

June 28, 2013

Mr. George V. Hicks
Sanitary Engineer
Municipal Facilities Section, Water Management Bureau
Department of Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

Subject: GNHWPCA Annual Progress Report

Consent Order WC5509

Dear Mr. Hicks:

Per Section B6 of the Consent Order WC5509, the Authority has assembled this letter and informational attachments to fulfill the requirement of an annual "progress report" which describes the actions the Authority has taken to comply with the Consent Order.

New to this year's Annual Progress Report is the GNHWPCA's first Annual CSO Flow Monitoring Program Data included as **Attachment "E"**.

Please find the following attachments as summary of our progress:

Attachment "A" is an updated version of the CSO LTCP Table to be used in both the "Annual Progress Report" and "5-yr Update to the LTCP." The general format of this table was approved by DEEP on 9/14/11. We have updated the "2013 Status" column to reflect all relevant project information and notes.

Attachment "B" is a listing of Approval / Denial letters the Authority has received from the DEEP between July 1, 2012 and the date of this letter. In summary the following CWF projects obtained approval:

- 1. Yale/Trumbull Phase 2 Study
- 2. Yale/Trumbull Phase 2 Preliminary Design
- 3. Yale/Trumbull Phase 2 Environmental Justice PP
- 4. Wet Weather / Nitrogen Phase 1 Design Amendment No. 1
- 5. Wet Weather / Nitrogen Phase 1 Approval to Advertise
- 6. Yale/Trumbull Phase 2 Preliminary Design
- 7. I/I Hamden and East Haven Approval to Advertise

Attachment "C" is a listing of emails between DEEP and the Authority from July 1, 2012 to the time of this letter. The emails are limited to those which include a transmission of

documents or critical information relevant to the consent order and/or moving projects to construction through the CWF program.

Attachment "D" is a listing of GNHWPCA letter transmissions to the DEEP between July 1, 2012 and the date of this letter.

Attachments C and D are not intended to be comprehensive listings of all correspondence between GNHWPCA and DEEP. Rather they are those communications that contain material and substantive information on the relative subjects.

Attachment "E" includes calibrated flow monitoring results obtained from all Permitted CSO outfalls between June 8, 2012 and April 30, 2013. Monitoring was installed throughout the course of the entire year; therefore, some outfalls have more "meter months" than others. An updated CSO Map has also been included as part of this attachment.

I have personally examined and am familiar with the information submitted in these documents and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachment may be punishable as a criminal offense.

Sincerely,

Greater New Haven Water Pollution Control Authority

Sidney J. Holbrook

Executive Director

cc: Gabe Varca, Director of Finance and Administration Gary Zrelak, Director of Operations Thomas V. Sgroi, P.E., Director of Engineering

Enc.

ATTACHMENT A

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY CSO LONG TERM CONTROL PLAN ANNUAL STATUS REPORT June 30, 2013

1997 EXISTING CONDITIONS MODEL						2007 MODEL UPDATE 2013 STATUS								
								2007	MODEL OF BATE			2013	714103	
NPDES PERMIT CSO REFERENCE NO.	NO. OF CSO OUTFALLS	NO. OF CSO REGULATOR LOCATIONS	CSO REGULATOR LOCATION	CSO RECEIVING WATER	1997 CSO REGULATOR STATUS	1997 EXISTING CONDITIONS MODEL ¹ 2-YEAR DESIGN STORM CSO VOLUME (MG)	CSO LTCP CAPITAL IMPROVEMENTS 1997-2007	2007 CSO REGULATOR STATUS	2007 EXISTING CONDITONS MODEL ² 2- YEAR DESIGN STORM CSO VOLUME (MG)	REDUCTION 1997- 2007 CSO VOLUME (MG)	NPDES PERMIT CSO REFERENCE NO.	PROPOSED NPDES PERMIT CSO REF. NO.	CSO LTCP CAPITAL IMPROVEMENTS & NOTES 2007-2013	2013 CSO REGULATOR STATUS
CSO 001	1	1	East Shore WPAF	New Haven Harbor	Active			Active			CSO 001	CSO 001		Active
CSO 002	2	2	E.T.G. Boulevard @ Lamberton Street	West River	Active	1.1	Truman Tank	Closed	0.0	1.1	CSO 002			Closed
CSO 003	3	3	E.T.G.Boulevard @ Orange Avenue	West River	Active	4.3	Truman Tank	Active	3.1	1.2	CSO 003	CSO 003		Active
CSO 004	4	4	E.T.G. Boulevard @ Legion Avenue	West River	Active	6.1		Active	6.1	0.0	CSO 004	CSO 004		Active
CSO 005		5	E.T.G. Boulevard @ Derby Avenue	West River	Active	5.0		Active	4.8	0.2	CSO 005	CSO 005		Active
CSO 005 (A)	5	6	University Place		Active	Discharges to CSO 005 outfall		Active	Discharges to CSO 005 outfall		CSO 005 (A)			Closed
CSO 005 (B)		7	Elm / University Place		Active	Discharges to CSO 005 outfall		Active	Discharges to CSO 005 outfall	A	CSO 005 (B)			Closed
CSO 006	6	8	Whalley Avenue @ Fitch Street	West River	Active	4.6		Active	5.1	-0.5	CSO 006	CSO 006		Active
CSO 007	7	9	Munson Street @ Canal Street	Mill River	Closed	0.0		Closed	0.0	0.0	CSO 007			Closed
CSO 008	8	10	Munson Street @ Orchard Street	Beaver Ponds	Active	0.2		Active	0.2	0.0	CSO 008		Scheduled for Closure	Close (2013)
CSO 009	9	11	Grand Avenue @ James Street	Mill River	Active	2.8		Active	2.5	0.3	CSO 009	CSO 009	I&I Project in Progress	Active
	10							29000000				CSO 009	Scheduled for Closure Sewer	
CSO 010	1 - 3	12	East Street @ I-91	Mill River	Active	0.7	Sewer Separation	Active	0.3	0.4	CSO 010		Separation in Progress	Close (2013)
CSO 010 (A)		13	East Street @ I-91	Mill River	Active	0.7		Active	0.6	0.1	CSO 010 (A)	R 010 (A)	Sewer Separation in Progress Discharges to CSO 011	Active
CSO 011	11	14	Humphrey Street @ I-91	Mill River	Active	9.9	Sewer Separation	Active	7.4	2.5	CSO 011	CSO 011	Sewer Separation in Progress	Active
CSO 012	12	15	Mitchell Drive east of Nicoll Street	Mill River	Active	2.7	Sewer Separation	Active	1.5	1,2	CSO 012	CSO 012		Active
CSO 013	13	16	Everitt Street @ East Rock Road	Mill River	Active	0.8	Sewer Separation	Active	0.1 Discharges to CSO 013	0.7	CSO 013	CSO 013		Active
CSO 013 (A)		17	East Rock Road @ Everitt Street		Active	Discharges to CSO 013 outfall		Active	outfall		CSO 013 (A)		Scheduled for Closure Sewer	Closed
CSO 014	14	18	Trumbull Street @ Orange Street	Mill River	Active	0.9		Active	1.0	-0.1	CSO 014	R 014	Separation in Progress Discharges to CSO 011	Close (2013)
CSO 015	15	19	James Street Siphon	Quinnipiac River	Active	4.6		Active	1.7	2.9	CSO 015	CSO 015	(&) Project in Progress; Tide Gate 2012	Active
CSO 016	16	20	Poplar Street @ River Street	Quinnipiac River	Active	1.7		Active	3.8	-2.1	CSO 016	CSO 016	Tide Gate 2010	Active
CSO 017	17	21	Grand Avenue @ Front Street	Quinnipiac River	Closed	0.0		Closed	0.0	0.0	CSO 017		1102 0010 2020	Closed
CSO 018	18	22	Lombard Street @ North Front Street	Quinnipiac River	Active	1.7	Sewer Separation	Closed	0.0	1.7	CSO 018	- T		Closed
CSO 019	19	23	Pine Street @ North Front Street	Quinnipiac River	Active	1.5	Sewer Separation	Active	1.3	0.2	CSO 019	CSO 019		Active
CSO 020	20	24	Quinnipiac Avenue @ Clifton Street	Quinniplac River	Active	0.2		Active	0.6	-0.4	CSO 020	CSO 020		Active
CSO 021	21	25	East Street Pump Station	New Haven Harbor	Active	5.4	Sewer Separation	Active	5.0	0.4	CSO 021	CSO 021	Sewer Separation in Progress; Tide Gate 2013	Active
CSO 021 (A)		26	Chapel / Hamilton	New Haven Harbor	Active	Discharges to CSO 021 outfall	Sewer Separation	Closed	0.0	0.0	CSO 021 (A)			Closed
CSO 022	22	27	Allen Place	New Haven Harbor	Active	No model data	Sewer Separation	Closed	0.0		CSO 022			Closed
CSO 023	23	28	Chestnut Street @ Water Street	New Haven Harbor	Closed	0.0		Closed	0.0	0.0	CSO 023			Closed
CSO 024	24	29	Boulevard Pump Station	New Haven Harbor	Active	3.5	Truman Tank	Active	0.6	2.9	CSO 024	CSO 024	Tide Gate 2010	Active
CSO 025	-	30	Union Pump Station	New Haven Harbor	Active	4.2	Sewer Separation	Active	2.5 Discharges to CSO 025	1.7	CSO 025	CSO 025		Active
CSO 025 (A)	25	31	Elm / University Place	New Haven Harbor	Active	Discharges to CSO 025 outfall	Sewer Separation	Active	outfall		CSO 025 (A)			Closed
CSO 025 (B)		32	Grove / Whitney	New Haven Harbor	Active	Discharges to CSO 025 outfall	Sewer Separation	Closed	0.0	0.0	CSO 025 (B)			Closed
CSO 026	26	33	Humphrey Pump Station	Mill River	Active	0.1	Sewer Separation	Active	0.0	0.1	CSO 026	R 026	Discharges to CSO 011	Active
CSO 027	27	34	East / Ives	Mill River	Active	0.7		Active	0.5	0.2	CSO 027		Closed CSO	Closed
CSO 028	28	35	Mitchell Pump Station	Mill River	Active	0.0	Pump Station	Active	0.0	0.0	CSO 028	R 028	Discharge to CSO 012	Active
CSO 029	29	36	Barnes Pump Station	Quinniplac River	Active	0.3	Upgrade	Closed	0.0	0.3	CSO 029			Closed
CSO 030	30	37	Quinniplac Pump Station	Quinniplac River	Active	No model data	Pump Station Upgrade	Closed	0.0	0.0	CSO 030			Closed
CSO 031	31	38	South Frontage / Davenport	New Haven Harbor	Active	No model data	Sewer Separation	Active	0.9	No model data	CSO 031		Closed CSO	Closed
CSO 032	32	39	Port Sea / Liberty	New Haven Harbor	Active	No model data		Active	0.0	No model data	CSO 032	R 032	Scheduled for Closure	Close (2013)
CSO 033	33	40	Carlisle / Liberty	New Haven Harbor	Active	No model data		Active	0.0	No model data	CSO 033		Closed CSO	Closed
CSO 034	34	41	George / Temple	New Haven Harbor	Active	1.0		Active	0.9	0.1	CSO 034	R 034	Discharge to CSO 025	Active
CSO 035	35	42	Woodward Pump Station	New Haven Harbor	Active	0.1		Active	0.1	0.0	C\$O 035		Closed CSO	Closed
(not assigned)	36	43	Greene Street	New Haven Harbor	Active	No model data		Active	0.0	No model data	(not assigned)	CSO GREENE		Active
N/A N/A	37	44	Middletown / Front State / James	Quinniplac River Mill River	Closed Closed	0.0		Closed Closed	0.0	0.0	N/A N/A			Closed Closed
CSO VOLUME (MG)						64.8	X=		50.6	14.2	,			
SO VOLUME REDUCT						0%			22%					
NUMBER OF ACTIVE C					40			33		⇒				21
NUMBER OF INACTIVE		REGULATORS			5 33	4		12	-					24 17
HINADED OF ACTIVE C														
IUMBER OF ACTIVE C		OLIFALLS			5	Ⅎ		28 10	-					21

2011 CSO LTCP PROPOSED CAPITAL IMPROVEMENTS	2011 CSO LTCP FINAL CSO STATUS	2011 CSO LTCP FUTURE CONDITIONS MODEL ² 2-YEAR DESIGN STORM CSO VOLUME (MG)
Wet Weather Improvements	Active w/ Treatment	
	Closed	0.0
CSO Storage Tank	Inactive	0.0
CSO Storage Tank	Inactive	0.0
CSO Storage Tank	Inactive	0.0
Discharges to CSO 005 Storage Tank	Inactive	0.0
Discharges to CSO 005 Storage Tank	Inactive	0.0
CSO Storage Tank	Inactive	0.0
	Closed	0.0
Monitoring Program	Active	0.1
Sewer Separation and Roof Leader Disconnection	Inactive	0.0
Monitoring Program	Active	0.3
Monitoring Program	Active	0.5
CSO Storage Tank	Inactive	0.0
CSO Storage Tank	Inactive	0.0
Monitoring Program	Inactive	0.0
Discharges to CSO 013 outfall	Inactive	0.0
Sewer Separation / Monitoring Program	Inactive	
Course Consention and Boof Landor	inactive	0.0
Sewer Separation and Roof Leader Disconnection	Inactive	0.0
Sewer Separation and Roof Leader	1	
Disconnection	Inactive Closed	0.0
The second second	Closed	0.0
Sewer Separation and Roof Leader	Closed	0.0
Disconnection	Inactive	0.0
Monitoring Program	Closed	0.0
Major Pump Station Upgrade / Monitoring	Ciosed	0.0
Program	Active	0.2
riogiani	Closed	0.0
	Closed	0.0
	Closed	0.0
Major Pump Station Upgrade	Inactive	0.0
Major Pump Station Upgrade / Monitoring	- Industrie	0.0
Program	Inactive	0.2
Monitoring Program	Inactive	0.0
	Closed	0.0
Monitoring Program	Closed	0.0
Close CSO	Closed	0.0
ciose cso	Closed	0.0
And the last of th	Closed	0.0
	Closed	0.0
Close CSO	Closed	0.0
Monitoring Program	Closed	0.0
Close CSO	Closed	0.0
Monitoring Program	Active	0.8
Close CSO	Closed	0.0
Monitoring Program	Closed	0.0
	Closed	0.0
The second secon	Closed	0.0
		2.1 97%
	6	
	39	7

FACILITIES PLAN &

LE	GE	N	D/	N	01	E
	v		-1		٠,	•

**********	Consideration of the control of the section of the control of the
	DENOTES CSO OUTFALL CURRENTLY INACTIVE/CLOSED
1	DATA OBTAINED FROM 2001 LTCP
2	DATA OBTAINED FROM 2011 FACILITIES PLAN

3	IT IS PROPOSED THAT THE REMAINING 2.1MG OF CSO VOLUME WOULD EITHER BE CAPTURED BY A TANK(S) OR ELIMINATED THROUGH SEPARATION TYPE PROJECT WITHIN EACH
	RESPECTIVE SEWERSHED. THE FACILITIES PLAN ASSUMES THAT THERE WILL BE BETTER INFORMATION AT THE TIME WE VISIT EACH SEWERSHED AND THAT A COST BENEFIT
	DETERMINATION WITH THEN BE MADE TO REACH THE GOAL OF ZERO OVERFLOWS DURING A 2-YEAR EVENT. FURTHER CLARIFICATION OF THIS APPROACH CAN BE FOUND IN
	THE THE LETTER FROM THE AUTHORITY TO DEEP'S GEORGE V. HICKS DATED JUNE 21, 2011 REGARDING THE GHNWPCA LONG TERM CONTROL PLAN UPDATE.

DEFINITIONS						
ACTIVE	ACTIVE CSO DURING A 2-YEAR STORM FREQUENCY, SEE NOTE NO. 3					
INACTIVE	INACTIVE CSO DURING STORM FREQUENCIES BELOW 2-YEARS					
CLOSED	CLOSED - BULKHEADED CSO, CLOSED FOR ALL STORMS					

ATTACHMENT B



			FY 2013 DEEP LETTER CORRESPONDENCE	E		
APPROVAL DATE	LETTER TYPE	CWF#	PROJECT	Amount	то	FROM
06/25/12	Approval	CWF-627	FOG Expansion Project - Change Order No. 1	\$17,635	Sid Holbrook	Dennis Greci
08/01/12	Approval	CWF-581	Yale/Trumbull Phase 2 Sewer Separation Study		Sid Holbrook	Denise Ruzicka, PE
09/05/12	Approval	CWF-627	FOG Expansion Project - Tighe and Bond Amendment No. 3	\$9,356	Sid Holbrook	Dennis Greci
10/25/12	Denial	CWF-581	Yale/Trumbull Street Phase 1A Change Order No. 1	\$24,150	Sid Holbrook	Dennis Greci
10/26/12	Approval	CWF-211	Final Report - Woodbridge I/I Study	2	Sid Holbrook	Denise Ruzicka, PE
11/02/12	Approval	CWF-441D	Environmental Justice Public Participation Plan	-	Tom Sgroi, PE	Edith Pestana
11/05/12	Approval	CWF-441D	WW Nitrogen Phase 1 - Amendment No. 1	\$643,000	Sid Holbrook	Dennis Greci
11/21/12	Approval	CWF-441D	WW Nitrogen NDDB Request	-	Eric Muir	Nelson B DeBarros
11/21/12	Approval	CWF-Pending	Yale/Trumbulee Phase 2A - Preliminary Design	\$447,663	Sid Holbrook	Dennis Greci
03/07/13	Denial	CWF-441D	WW Nitrogen Phase 1 - Hach and Allen Bradley Sole Source	-	Sid Holbrook	Dennis Greci
03/19/13	Approval	CWF-441D	WW Nitrogen Phase 1 - VE Studies	-	Sid Holbrook	Denise Ruzicka, PE
04/01/13	Approval	CWF-441D	WW Nitrogen Flood Management Certificate	-	Denise Ruzicka, PE	Cheyl A. Chase
04/12/13	Eligibility Ruling	CWF-441D	WW Nitrogen Phase 1 - Bury UI Services (not eligible)	-	Sid Holbrook	George Hicks, PE
04/15/13	Denial	CWF-441D	WW Nitrogen Phase 1 - Hach Sole Source	-	Sid Holbrook	Dennis Greci
04/29/13	Approval	CWF-581	Yale/Trumbull Phase 1A Change Order No. 2	\$88,997	Sid Holbrook	Dennis Greci
05/13/13	Approval	CWF-441C	WW Nitrogen Phase 1 - Approval to Advertise		Sid Holbrook	Dennis Greci
05/22/13	Approval	CWF-Pending	I/I Rehab - State St Hamden, Area 10 EH - Appr to Advertise		Sid Holbrook	Denise Ruzicka, PE

ATTACHMENT C



			FY 2013 DEEP / GNH EMAIL TRANSMITTALS		
DATE	EMAIL TYPE	CWF#	PROJECT	то	FROM
08/03/13	Transmittal	CWF 581	Yale/Trumbull Phase 2 Report Approval Advanced Copy	T.Sgroi, PE	I.Hall, PE
11/02/13	Transmittal	CWF-441D	EJPP Approval Advanced Copy	S.Holbrook	E.Pestana
01/03/13	RF Comment	Bill No. 88	Public Right To Know Request for Comment	T.Sgroi, PE	I.Hall, PE
01/07/13	Transmittal	Bill No. 88	Public Right To Know Revised Language	I.Hall, PE	T.Sgroi, P
01/09/13	RF Comment	Bill No. 88	Public Right to Know FAQ Sheet	T.Sgroi, PE	I.Raffa
01/14/13	RFI	CWF Various	RFI on the 2-yr Bid Schedule and project status	M.Ricozzi/T.Sgroi	I.Hall, PE
01/14/13	Response to RFI	CWF Various	Report on Progress	I.Hall, PE	T.Sgroi, P
02/05/13	Transmittal	CO WC5509	Electronic Copy of 2-year Bid Schdule sent 12/28/12	I.Hall, PE	T.Sgroi, P
02/21/13	RFI	Bill No. 88	Public Right To Know Contact Number	T.Sgroi, PE	I.Hall, PE
02/22/13	Reponse to RFI	Bill No. 88	Contact information provided	I.Hall, PE	T.Sgroi, P
03/07/13	Informational	CWF Question	Question clarifing Eligibility of CWF for GI	NH Resident	D.Greci
03/08/13	Transmittal	CWF Eligiblity	Transmital of Link to Draft Eligibility Memos	All Muni's	P.Gilmore
03/13/13	Comments	GI Committee	Comments on GI Eligibility Memo and 3/14 Mtg Agenda	I.Hall, PE	T.Sgroi, P
03/28/13	Informational	GI Committee	Comments on GI Committee Meeting held on 3/14	T.Sgroi, PE	I.Hall, PE
03/28/13	Transmittal	CWF-441D	FMC Approval Sent by IWRD for Final Signature	M.Ricozzi, PE	S.Muollo
04/03/13	Informational	CWF -627	Confirming approval of Capitalizaiton of accured interest	M.Ricozzi/L.Rogers	S.Peay
04/08/13	Informational	CWF-Priority List	Email confirming that deadline has been moved to 10/30/13	M.Ricozzi, PE	I.Hall, PE
05/20/13	Informational	Bill No. 88	Public Right To Know - Public Health Warnings	T.Sgroi, PE	I.Hall, PE

ATTACHMENT D



DOCUMENT DATE TYPE CWF#		CWF#	PROJECT	то	FROM
05/30/12	Letter	CWF 441-D	WW Nitrogen Phase 1 - Env Justice Program Plan Submittal	Edith Pestana	T.Sgroi, PE
06/26/12	Transmittal	CWF 581C2	James Street Tide Gate NTP	I.Hall, PE	M.Ricozzi, PE
08/20/12	Transmittal	CWF 581C2	Yale/Trumbull Phase 1A - Change Order No. 1	I.Hall, PE	M.Ricozzi, PE
09/17/12	Transmittal	CWF 629 & 211	I/I Phase 1 Study Woodbridge and Design State St and Area 10	I.Hall, PE	M.Ricozzi, PE
12/28/12	Transmittal	CO WC5509	GNHWPCA Two Year Bid Schedule	G.Hicks, PE	S.Holbrook
01/07/13	Letter	CWF 441D	WW Nitrogen Phase 1 - Proprietary Equipment Request	S.Muollo	Sgroi & Zrelak
01/10/13	Letter	USEPA RFI	CSO Flow Monitoring Plan Status Report	Neil Handler	S.Holbrook
02/08/13	Letter	USEPA RFI	Follow-up Letter from EPA Meeting	Neil Handler	S.Holbrook
02/14/13	Transmittal	CWF 441D	WW Nitrogen Phase 1 - VE Study #2	S.Muollo	M.Ricozzi, PE
03/13/13	Letter Trans	USEPA RFI	CSO Flow Monitoring Reports	Handler/Hicks	S.Holbrook
04/15/13	Transmittal	CWF-TBD	I/I State St Hamden & Area 10 East Haven Authorization to Bid	I.Hall, PE	M.Ricozzi, PE
04/16/13	Transmittal	CWF-441D	WW Nitrogen Phase 1 - Various Bid Documents	S.Muollo	M.Ricozzi, PE
05/03/13	Transmittal	CWF-441C	WW Nitrogen Phase 1 - Volumes 1 through 5 of Plans and Specs	S.Muollo	M.Ricozzi, PE
05/13/13	Transmittal	CWF-581C2	Replacement of Tide Gate at East St - Change Order No. 2	I.Hall, PE	M.Ricozzi, PE
05/16/13	Transmittal	CWF-TBD	I/I State St Hamden & Area 10 East Haven Rev. Plans and Specs	I.Hall, PE	M.Ricozzi, PE
05/24/13	Transmittal	CWF-441C	WW Nitrogen Phase 1 Addendum No. 1	S.Muollo	M.Ricozzi, PE
06/17/13	Transmittal	CWF-441C	WW Nitorgen Phase1 - Addendum No. 2 and 3	S.Muollo	M.Ricozzi, PE

ATTACHMENT E

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY



JUNE 2013 ANNUAL CSO FLOW MONITORING PROGRAM DATA

ATTACHMENT "E"

JUNE 2013 ANNUAL CSO FLOW MONITORING PROGRAM DATA

TABLE OF CONTENTS

SECTION	PAGES
Updated Sewer Map	1
Monitoring Status Report June 2013	2
Meter Data Summary June 2012 through April 2013	1
Meter Data – April 2013	21
Meter Data – March 2013	21
Meter Data – February 2013	18
Meter Data – January 2013	16
Meter Data – December 2012	16
Meter Data – November 2012	14
Meter Data – October 2012	13
Meter Data – September 2012	11
Meter Data – August 2012	9
Meter Data – July 2012	5
Meter Data – June 2012	5
Meter Data Summary – Typical Year Estimates	1





MONITORING STATUS REPORT JUNE 2013

GREATER NEW HAVEN WPCA CSO FLOW MONITORING PLAN STATUS REPORT 6/12/2013 CALIBRATION PERIOD REGULATOR NUMBERS CSL/SCADA METER DESIGNATION CSL/SCADA METER LOCATION CSL/SCADA METER DATA DATE INSTALLED COMPLETED CSO NUMBER **BOULEVARD PUMP STATION TRIBUTARY AREA** NHRG Boulevard PS Total rainfall in 5 min increments Jun-12 Aug-12 CSO 008 **REG 008** CSO 006 REG 006 OF-006 Overflow AA depth and velocity in 5 min increments during overflows In one of two 24 inch overflow pipes Oct-12 Aug-12 **REG 006** OF-006 Overflow BB In one of two 24 inch overflow pipes depth and velocity in 5 min increments during overflows Oct-12 Aug-12 OF-006 Sewer In 36 inch sewer upstream of twin 24 inch overflow pipes depth and velocity in 5 min increments Jun-12 Aug-12 CSO 005 **REG 005** OF-005 Overflow In 48 inch overflow pipe depth and velocity in 5 min increments during overflows Jun-12 Oct-12 In 60 inch wide by 57 inch high sewer at REG 005 OF-005 Sewer depth and velocity in 5 min increments Jun-12 Oct-12 CSO 004 **REG 004** OF-004 Overflow In 3 foot high by 5 foot wide overflow box culvert depth and velocity in 5 min increments during overflows Jun-12 Aug-12 OF-004 Sewer In 72 inch wide by 64 inch high sewer downstream of REG 004 depth and velocity in 5 min increments Jun-12 Aug-12 CSO 003 **REG 003** OF-003 Overflow In 54 inch overflow pipe depth and velocity in 5 min increments during overflows Jun-12 Aug-12 OF-003 Sewer In 72 inch wide by 64 inch high sewer downstream of REG 003 depth and velocity in 5 min increments Jun-12 Aug-12 GNH 1 In 72 inch wide by 64 inch high sewer downstream of Truman Tank diversion chamber depth and velocity in 5 min increments Jun-12 Aug-12 Truman Tank SCADA Data In cell 1 and cell 2 of Truman Tank Depth in cell 1 and cell 2 of Truman Tank in 5 min increments Jun-12 Jun-12 CSO 024 **REG 024** OF-024 US In 84 inch wide by 69 inch high sewer upstream of REG 024 depth and velocity in 5 min increments Aug-12 Jan-13 OF-024 DS In 48 inch sewer downstream of REG 024 depth and velocity in 5 min increments Aug-12 Jan-13 In REG 024 depth at the overflow weir in 5 min increments OF-024 weir Dec-12 Dec-12 BPS SCADA Data In wetwell 1 and wetwell 2 of Boulevard PS depth in wetwell 1 and wetwell 2 of BPS in 5 min increments Jun-12 Jun-12 **BPS SCADA Data** Magmeters on each of four pump discharges (uncalibrated) sum of flow from four magmeters in 5 min increments Jun-12 Jun-12 5 CSOs **5 Regulators** 12 Meters UNION PUMP STATION TRIBUTARY AREA CSO 025 **REG 034** Regulator 034 Sewer In 48 inch sewer at REG 034 depth and velocity in 5 min increments Mar-13 Apr-13 **REG 034** Regulator 034 Sewer In REG 034 depth and velocity in 5 min increments during overflows Mar-13 Apr-13 **REG 025** In REG 025 depth and velocity in 5 min increments during overflows Dec-12 Jan-13 **REG 032** 1 CSO 2 Regulators 2 Meters EAST STREET PUMP STATION TRIBUTARY AREA (INCLUDES UNION PUMP STATION TRIBUTARY AREA) REG 013 OF-013 Sewer In 37 inch wide by 25 inch high sewer at REG 013 CSO 013 depth and velocity in 5 min increments Mar-13 Apr-13 REG 013 In REG 013 OF-013 weir depth and velocity in 5 min increments during overflows Mar-13 Apr-13 CSO 012 **REG 012** OF-012 A In one of two 18 inch overflow pipes depth and velocity in 5 min increments during overflows Aug-12 Oct-12 **REG 012** OF-012 B In one of two 18 inch overflow pipes depth and velocity in 5 min increments during overflows Oct-12 Aug-12 **REG 028** MPS SCADA Data In wetwell of Mitchell Drive PS depth in wetwell of MPS in 5 min increments Aug-12 Aug-12 CSO 010 **REG 010** OF-010 In 54 inch sewer at REG 010 and REG 010 A depth and velocity in 5 min increments Dec-12 Jan-13 CSO 011 In 54 inch sewer at REG 010 and REG 010 A REG 010 A OF-010 A depth and velocity in 5 min increments Dec-12 Jan-13 **REG 014** OF-014 Sewer In 66 inch sewer at REG 014 depth and velocity in 5 min increments Dec-12 Jan-13

depth at the overflow weir in 5 min increments

Dec-12

Jan-13

In REG 014

REG 014

OF-014 Overflow

GREATER NEW HAVEN WPCA CSO FLOW MONITORING PLAN STATUS REPORT 6/12/2013

			0/12/2013			
						CALIBRATION PERI
CSO NUMBER	REGULATOR NUMBERS	CSL/SCADA METER DESIGNATION	CSL/SCADA METER LOCATION	CSL/SCADA METER DATA	DATE INSTALLED	COMPLETED
	REG 011				1	
		OF-011-997	In 30 inch sewer on State Street upstream of REG 011	depth and velocity in 5 min increments	Dec-12	Jan-13
		OF-011-609	In 37 inch wide by 25 inch high sewer on Humphrey Street upstream of REG 011	depth and velocity in 5 min increments	Dec-12	Jan-13
		OF-011-631	In 66 inch sewer on State Street upstream of REG 011	depth and velocity in 5 min increments	Dec-12	Jan-13
		OF-011-819	In 42 inch sewer on Humphrey Street downstream of REG 011	depth and velocity in 5 min increments	Dec-12	Jan-13
	REG 026	HPS SCADA Data	In wetwell of Humphrey Street PS	depth in wetwell of HPS in 5 min increments	Jun-12	Jun-12
CSO GREENE	REG GREENE	OF-Greene	In 54 inch overflow pipe	depth and velocity in 5 min increments during overflows	Aug-12	Oct-12
CSO 021						
	REG 021	E St PS Sewer	In 62 inch wide by 67 inch high sewer upstream of REG 021	depth and velocity in 5 min increments	Nov-12	Dec-12
		OF-021	In REG 021	depth at the overflow weir in 5 min increments	Sep-12	Oct-12
6 CSOS	10 Regulators	12 Meters				
			JAMES STREET SIPHON TRIBUTARY AREA			
CSO 009	REG 009	OF-009	In 30 inch wide by 45 inch high overflow pipe	depth and velocity in 5 min increments during overflows	Oct-12	Jan-13
CSO 019	REG 019	OF-019	In 24 inch overflow pipe	depth and velocity in 5 min increments during overflows	Aug-12	Nov-12
CSO 016	REG 016	OF-016	In 60 inch wide by 48 inch high overflow pipe	depth and velocity in 5 min increments during overflows	Sep-12	Nov-12
CSO 015	REG 015					
		OF-015 US	In 45 inch sewer upstream of REG 015	depth and velocity in 5 min increments	Oct-12	Jan-13
		OF-015 DS	In 48 inch sewer downstream of REG 015	depth and velocity in 5 min increments	Oct-12	Jan-13
4 CSOs	4 Regulators	5 Meters				
			ESWPAF TRIBUTARY AREA			
CSO 020	REG 020	OF-020	In 24 inch sewer at REG 020	depth and velocity in 5 min increments	Mar-13	Apr-13
	REG 020	OF-020	In REG 020	depth at the overflow pipe in 5 min increments	Mar-13	Apr-13
1 CSO	1 Regulator	1 Meter				
	TOTALS					
17 CSOs	22 Regulators	32 Meters				
17 6305	ZZ Regulators	32 Weters				

METER DATA SUMMARY

JUNE 2012 - APRIL 2013

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY CSO FLOW MONITORING PROGRAM METER DATA SUMMARY - THROUGH APRIL 2013

CSO NUMBER	REGULATOR NUMBERS	CSO EVENTS	CSO VOLUME (MG)	RAINFALL (IN)	METER MONTHS
CSO 006	REGS 006 A, 006 B	12	5.194	34.87	11
CSO 005	REG 005	31	4.449	34.87	11
CSO 004	REG 004	38	20.606	34.87	11
CSO 003	REG 003	25	13.657	34.87	11
CSO 024	REG 024	9	14.165	29.27	9
CSO 009	REG 009	9	0.683	17.53	7
CSO 019	REG 019	4	0.199	29.27	9
CSO 016	REG 016	17	11.778	23.60	8
CSO 015	REG 015	6	1.224	17.53	7
CSO 010	REG 010	7	0.728	23.60	8
CSO 011	REGS 010A, 011, 014, 026	2	0.555	13.16	5
CSO 012	REGS 012A, 012B, 028	21	10.056	29.27	9
CSO GREENE	REG GREENE	3	0.111	29.27	9
CSO 025	REGS 025, 034	5	4.042	13.16	5
CSO 021	REG 021	8	8.742	14.16	6
CSO 013	REG 013	0	0.000	3.94	2
CSO 020	REG 020	0	0.000	3.94	2
TOTAL		197	96.189	34.87	11